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THE ESSENCE AND SCIENTIFIC-THEORETICAL FOUNDATIONS OF THE CONCEPT OF INFORMATION SECURITY

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ABSTRACT
This article analyzes the role of information security in ensuring military security, the history and development of information security, the essence of information security, scientific and theoretical foundations, as well as the technical and humanitarian directions of information.
KEYWORDS: *security, information security, revolution, analysis, history, antiquity, development, information, message, technical, humanitarian, scientific, theoretical, geopolitical, essence, object.*

Sharp changes in geopolitical processes, political, military, economic, social, information security and other problems are manifesting themselves in the conditions of various levels of contradictions. The complex international situation, increasing risks and threats to information security in the military sphere are also observed in Central Asian countries. Therefore, in the Republic of Uzbekistan, attention is being paid to the issue of ensuring information security at various levels from a strategic point of view.

Although it is necessary to express the content and essence of information, the dynamics of the process, the explanatory dictionary of the Uzbek language states that information is "a message, information that gives an understanding of work, events" [1]. Briefly, information means an idea, a concept and a message. In general, information is a concept that can be received by people or special devices as a reflection of events in the process of communication, regardless of the form of presentation.

In the Law of the Republic of Uzbekistan "On Principles and Guarantees of Freedom of Information", the word information is defined as follows: "information is defined as the data about persons, objects, evidence, events and processes, regardless of their sources and form of presentation" [2].

In the encyclopedia of information security, it is stated that: "information security is the state of security of information processed by computer technology or an automated system against internal or external threats" [3]. Therefore, information security is assessed by the state of protection of individuals, society, the state and their interests from threats, destructive and other negative effects in the information space. Islamic sources use the concepts of security (امن or امنية), military security (الامن الاسكري), information security (المعلومط الامن).

It should be noted that the difference between the concepts of information security and cyber security is that the goal of information security is to ensure confidentiality, integrity and availability of information in all areas. Cyber security, on the other hand, is a set of strategies, security principles and guarantees, measures and tools aimed at ensuring security in cyberspace (ie, the Internet, information systems, etc.), and human resources [4].

In other words, cyber security is a set of measures to combat cybercrime. Cybercrime includes many types of crimes in the field of information and communication technologies. These include threats to the virtual network, viruses and other malicious programs, preparation and distribution of illegal information, mass distribution of e-mails, hacking, illegal access to websites, fraud, copyright infringement and various other offenses.

In such cases, criminals aim to cause material or moral damage to the "objects" they are interested in.

Articles 12-15 of the Law of the Republic of Uzbekistan No. 439-II "On Principles and Guarantees of Freedom of Information" dated December 12, 2002 specifically focus on the protection of the information security of the individual, society, and the state interests.

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According to our research, threats to information security are divided into natural and artificial threats. (See Figure 1)

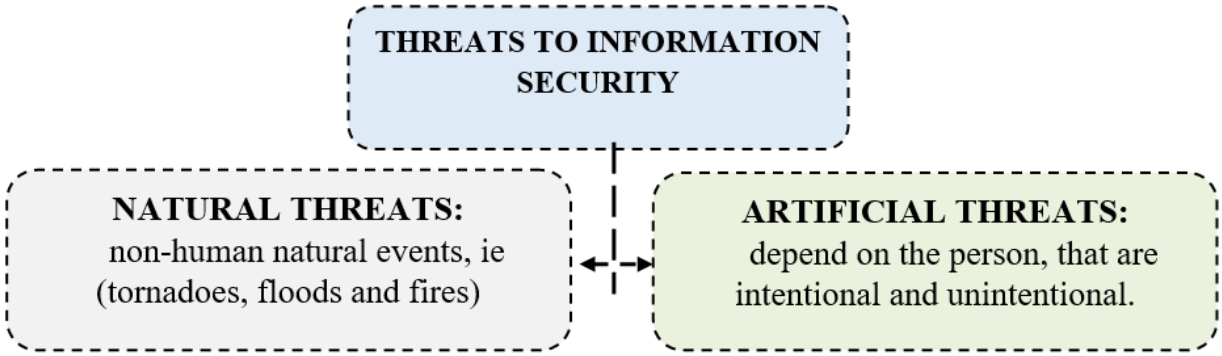

Figure 1. Natural and artificial threats to information security

As a result of such threats, it is explained by the complication of human development, the wide spread of nuclear, atomic and other weapons of mass destruction, the worsening of the ecological situation, the emergence of new dangerous diseases, the division of the world into opposite poles, the violation of the balance between states, and the emergence of new independent states.

Article 4 of the "International Convention on Information Security", adopted by the UN on September 22, 2011, the following are seen as the main threats in the information space that could damage international peace and stability:

The use of information technology and means of storing and transferring information to engage in hostile activity and acts of aggression;

Purposefully destructive behavior in the information space aimed against critically important structures of the government of another State;

The illegal use of the information resources of another government without the permission of that government, in the information space where those resources are located;

Actions in the information space aimed at undermining the political, economic, and social system of another government, and psychological campaigns carried out against the population of a State with the intent of destabilizing society;

The use of the international information space by governmental and non-governmental structures, organizations, groups, and individuals for terrorist, extremist, or other criminal purposes;

The dissemination of information across national borders, in a manner counter to the principles and norms of international law, as well as the national legislation of the government involved;

The use of an information infrastructure to disseminate information intended to inflame national, ethnic, or religious conflict, racist and xenophobic written materials, images or any other type of presenting ideas or theories that promote, enable, or incite hatred, discrimination, or violence against any individual or group, if the supporting reasons are based on race, skin color, national or ethnic origin, or religion;

The manipulation of the flow of information in the information space of other governments, disinformation or the concealment of information with the goal of adversely affecting the psychological or spiritual state of society, or eroding traditional cultural, moral, ethical, and aesthetic values;

The use, carried out in the information space, of information and communication technology and means to the detriment of fundamental human rights and freedoms;

The denial of access to new information and communication technologies, the creation of a state of technological dependence in the sphere of informatization, to the detriment of another State;

Information expansion, gaining control over the national information resources of another State.

Information protection is "measures to prevent threats to information security and eliminate their consequences" [5].

According to the approach of the Uzbek scientist N. Abdusamatov, "...security in any country is not the absence of danger at all, but the level of protection against it",[6] he emphasizes protection from the expected danger. In our opinion, such changes in the world are likely to increase the attention of foreign countries to the problems of security, military security, especially information security. Therefore, a paradigmatic analysis of approaches to ensuring information security in the military sphere is one of the urgent tasks.

Nowadays, the concept of information security is much narrower, and it is expressed only in the technical-technological section. In particular, the concept of information security is expressed in the following interpretation:[7]

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- Confidentiality, integrity, ease of use of information, protection from possible threats or deliberate distortion;
- Is a system of taking legal, organizational and technological measures to prevent intentional or accidental damage to confidentiality, completeness, ease of use or distortion of information.

In our opinion, information security includes technical and ideological directions. When defining these, it is appropriate to approach them taking into account internal and external risks, and to express the definition briefly and clearly, and separate it into technical and ideological directions:

Technical direction of information security:

- Infrastructures supporting state activities – telecommunications, transport networks, power stations, banking system;
- Electronic intervention in the processes of command and control of military facilities and systems, "headquarters wars", derailment of military communication networks;
- Military espionage – theft of patented information, confidential information of special importance, disruption/alteration or loss of services, collection of extensive information about opponents;
- VIR (Very Important Person) - hacking and using the passwords, identification numbers, bank accounts of individuals, obtaining confidential information, spreading disinformation.

ideological direction of information security:

- in order to understand, research and ensure information security, on the one hand, as an individual and a citizen, and on the other hand, it is related to the need to coordinate the balance of the interests of the state and society;
- paying special attention to ensuring information security in the system of the Ministry of Defense, that is, studying the threats of social instability, disruption of gradual evolutionary development and degradation of military personnel;
- by influencing the social, cultural, spiritual, educational, legal aspects, gradually forgetting the national identity;
- there is a possibility of bringing the society and the state into dependence by influencing the human mind through destructive information;
- instilling negative thoughts in the minds of military personnel by spreading false information about superiors. In this case, promoting disobedience of the military to the commanders (chiefs).

Therefore, one of the main indicators that are focused on providing high-quality service to users through telecommunication networks is the effectiveness of the state of information security. The problem of ensuring information security is gaining urgent importance today. It is closely related to issues such as confidentiality, integrity, access to information, and prevention of leakage of military secrets.

According to the well-known scientist N.N.Kunyaev, "the development of the global information space forces the state and its citizens to new legal and organizational coordination in the information sphere, as well as the aggression of other states or terrorist organizations" [8].

According to the definition of the American philosopher E. Toffler, "one of the main types of raw materials for the third wave civilization will be information" [10], he draws attention to the role of information in the development of the state, the essence and importance of information. In our opinion, because information is a broad concept, it has become more important in the political environment. Therefore, foreign political success began to focus not only on economic and military power, but also on establishing control over basic information.

Taking into account the different views of scientists, it is appropriate to approach the concept, essence and importance of information security as follows:

First, information security - the protected state of the information environment of the society that ensures the formation, application and development of the interests of people, institutions, and the state;

Secondly, information security is the level of protection of the vital national interests of the individual, society and the state, which minimizes the damage caused by incompleteness, untimeliness and unreliability of information and unauthorized dissemination of information.

According to the words of the President of the Republic of Uzbekistan - Commander-in-Chief of the Armed Forces Sh. Mirziyoyev, in the current situation where there is a sharp struggle in the world information space, ensuring information security, protecting young people from foreign ideas, and strengthening the psychological training and fighting spirit of military personnel remain relevant.

Taking into account the strategic importance of information security, we can make the following conclusions:

Firstly, although the concepts of information security and cyber security are used synonymously, information security consists of ensuring the confidentiality, integrity and availability of information, and the concept of cyber security mainly means ensuring security in the Internet network, information systems and the like;

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Secondly, there are technical and technical-anthropogenic or technical-humanitarian and integrative approaches to the content and importance of information security, which are emerging due to the existence of technical and ideological directions of information security, internal and external risks.

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